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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,747	05/26/2004	Edward C. Cooney III	FIS920030416US1	3746
29505	7590	11/21/2005		
DELIO & PETERSON, LLC 121 WHITNEY AVENUE NEW HAVEN, CT 06510			EXAMINER TRINH, MICHAEL MANH	
			ART UNIT 2822	PAPER NUMBER

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER
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ART UNIT	PAPER
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20051116

DATE MAILED:

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**Commissioner for Patents**

A CORRECTED OFFICE ACTION IS INCLUDED HEREWITH.

Art Unit: 2822

**CORRECTED DETAILED ACTION**

\*\*\* This office action is in response to Applicant's election filed on August 26, 2005. Claims 1-20 are pending, in which method claims 1-18 are elected, in which product claims 19-20 are non-elected, constructively, with traverse. Claim 19-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

**Examiner's Amendment**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this Examiner's Amendment was given in a telephone interview with Mr. Peter Peterson on September 27, 2005 to cancel non-elected claim 19. Authorization for this Examiner's Amendment was given in a telephone interview with Attorney Kelly Nowack on November 16, 2005 to also cancel non-elected claim 20.

IN THE CLAIM:

\*\* Cancel claims 19-20.

\*\*\*\*\*

IN THE SPECIFICATION: (just for correcting a typing error of numeral reference)

\*\* In the specification, line 2 of paragraph [0049], change "dielectric layer 22" to --dielectric layer 20--.

***Allowable Subject Matter***

3. Claims 1-18 are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter:  
The references of record including Ni et al (6,548,348), Catabay et al (6,537,896), Heiliger (2005/0148202), etc., alone or in combination, do not fairly anticipatively disclose each

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and every aspect of the claimed method, or fairly make a prima facie obvious case of the claimed method for closing exposed pores in a porous dielectric layer, in combination with other processing claimed limitations as recited in base claims, the inclusion of, as in claim 1, providing a second reactant into a mouth region of the at least one exposed pore of a low-k porous dielectric layer while simultaneously out-gassing the first reactant toward the mouth region; generating an in-situ chemical reaction at the mouth region by contacting the second reactant with the outgassed first reactant; and forming a pore-closing layer across the mouth region via the in-situ chemical reaction to transform the at least one exposed pore to at least one closed pore having porosity; and

as in claim 15, the inclusion of patterning the low-k dielectric layer to form openings; providing a first reactant within the exposed pores in the openings of the low-k dielectric layer; providing a second reactant into the openings, the second reactant at least being introduced into a mouth region of each the exposed pore while simultaneously out-gassing the first reactant toward the mouth region; generating an in-situ chemical reaction at least at the mouth region of each of the exposed pore by contacting the second reactant with the outgassed first reactant; and forming a pore-closing layer across the mouth region via the in-situ chemical reaction to transform the exposed pores to closed pores.

\*\*\*\*\*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Trinh whose telephone number is (571) 272-1847. The examiner can normally be reached on M-F, 9:00 Am to 5:30 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone numbers for the organization where this application proceeding is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Oacs-18,19



Michael Trinh  
Primary Examiner